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(56) Documents cited

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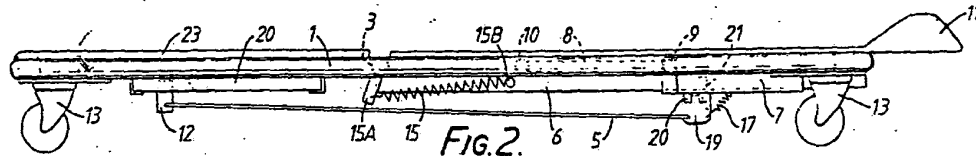
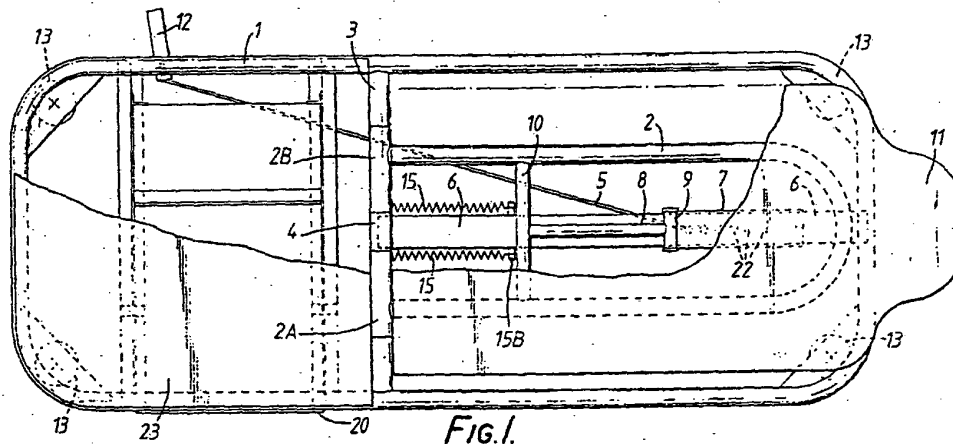
(58) Field of search

B7B

Selected US specifications from IPC sub-classes
B62H B62B

(54) Crawler board

(57) A low level crawler board for working underneath a vehicle has castor wheels 13 at the corners and an adjustable inclined back support 11 on a U frame 2 hinged to the trolley frame on a transverse axis 3 by steeves 2a,b, and provided with a catch 19 with a pin 21 engaging holes 22 to hold the support in any required position. The catch can be released by a hold lever 12 accessible to a person lying on the support.



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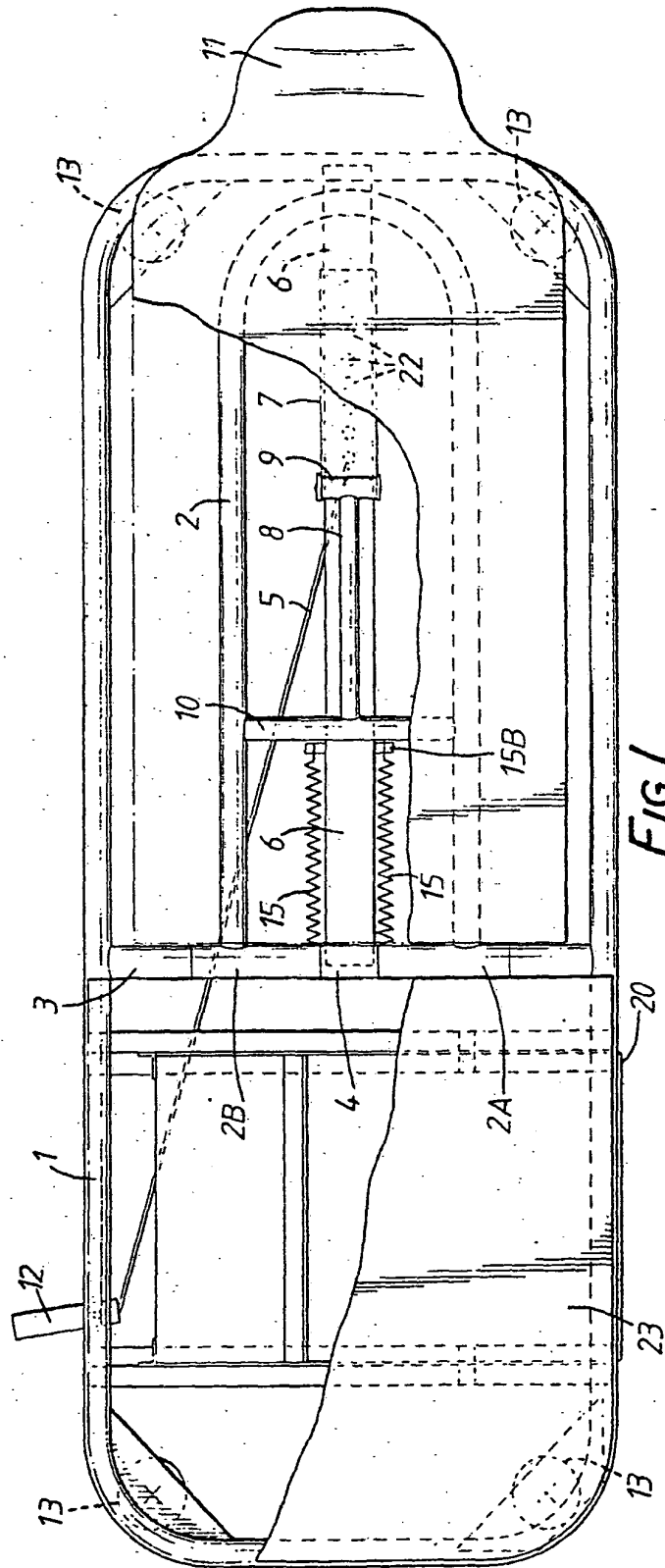


FIG. 1.

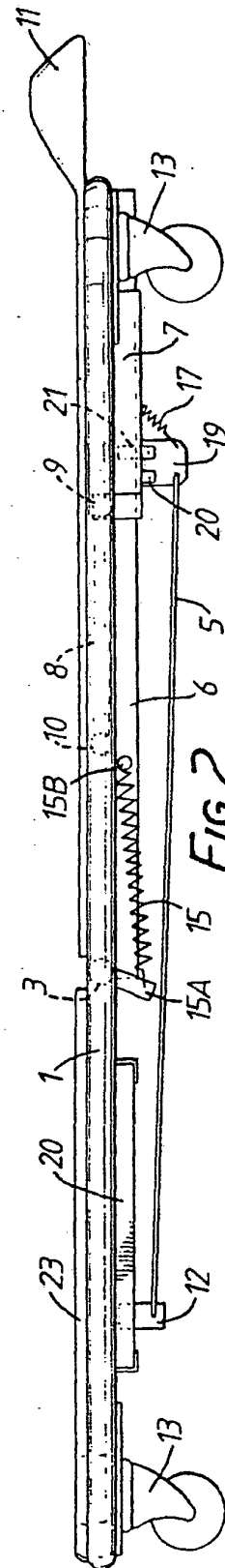


FIG. 2.

"Working Trolley"

This invention relates to a low level working trolley of the type used for repairs or maintenance work in confined spaces, for example beneath a vehicle or aircraft. Conventional working trolleys
5 have a pad for supporting a part of the operator's back or head, and a number of wheels or castors to allow the trolley to be manoeuvred. It is found, however, that the user's head and shoulders may need to be raised from the trolley to reach the part
10 being worked on and it is an object of the invention to meet this requirement.

Broadly stated the invention consists in a low level working trolley having a vertically adjustable support for the back and/or head or other
15 parts of the human body, and adjusting means for controlling the height of the support. Preferably the adjusting means includes an elevating mechanism, and there may be a spring assisted device for urging the support upwards. In any case it is of
20 advantage to have a positive lock for holding the support in one or more different positions of elevation. Preferably at least part of the support

is mounted on a pivoted member carried by the frame or base of the trolley, and in a preferred construction there is a force multiplying mechanism interconnected between the support and the control mechanism.

5 The adjusting means preferably includes a control element positioned on the trolley, and in a particular preferred construction the control means is positioned remote from the head support and accessible for hand actuation by an operator on the trolley.

10 The invention may be performed in various ways and one embodiment will now be described by way of example with reference to the accompanying drawings, in which:-

Figure 1 is an underneath plan view of a
15 working trolley according to the invention, and

Figure 2 is a side elevation thereof.

In this example the trolley comprises a main outer frame 1 formed of metal tubing shaped into an open rectangle and having four castor
20 wheels 13 positioned at its corners. A resilient head rest 11 is positioned on a back rest 10 in the form of a board secured to a pivoted U-frame 2, the ends of which are attached to sleeves 2A, 2B, pivoted on a fixed cross-shaft 3 attached to the
25 frame 1, with a spacer tube 4 positioned between the ends of the frame 2. This spacer tube is

attached to a rigid guide bar 6 the opposite end of which is secured to the adjacent end of the main frame, on which bar runs a movable slider 7. A strut 8 is connected at one end to a cross pin 9 pivotally attached to the slider 7, and at the other end to a pivot pin in a cross strut 10 connected to the back rest U-frame 2. A pair of tension springs 15 are connected between a fixed anchorage bracket 15A and attachments 15B on an extension sleeve connected to the slider 7, thus exerting an upward force on the U-frame 2 via the strut 8. It will be seen that the strut 8 and slider 7 act as a force-multiplying mechanism, thus exerting a greater upward force on the back rest than the actual force of the springs. The position of the U-frame can be locked by means of a catch 19 pivoted at 20 below the bar 6 and attached to a latch pin 21, which engages in any one of a number of spaced holes 22 on the bar 6. The catch is urged into a locking position with the pin 21 engaged in one of the holes 22 by a small spring 17, and can be released by a control link 5 connected to a pivoted operating lever 12 mounted on the frame 1 at the end remote from the head rest 11. A seat 23 is positioned at this end of the frame and the arrangement is such that an

operator in position on the trolley has the operating lever 12 accessible to his hand when lying prone on his back, i.e. adjacent the end of the trolley remote from the head end. There may be a sliding tray 20 5 below the seat 9 to hold tools or other equipment.

CLAIMS

1. A low level working trolley having a vertically adjustable support for the back and/or head or other parts of the human body, and adjusting means for controlling the height of the support.

5 2. A working trolley according to Claim 1, in which the adjusting means includes an elevating mechanism.

 3. A working trolley according to Claim 1 or Claim 2, including a spring assisted device
10 for urging the support upwards.

 4. A working trolley according to any of the preceding claims, including a positive lock for holding the support in one or more different positions of elevation.

15 5. A working trolley according to any of the preceding claims, in which at least part of the support is mounted on a pivoted member carried by the frame or base of the trolley.

 6. A working trolley according to any of
20 the preceding claims, including a force multiplying mechanism interconnected between the support and the control mechanism.

 7. A working trolley according to any

of the preceding claims, in which the control means is positioned remote from the head support and accessible for hand actuation by an operator on the trolley.

8. A low level working trolley with an adjustable support substantially as described with reference to the accompanying drawings.